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Challenges with Diet during the COVID Pandemic

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CHALLENGES WITH DIET DURING THE COVID PANDEMIC

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March 2021

Problems and challenges with healthy eating in Berlin, VT

- According to the National Centers for Disease Control and Prevention:
 - ❖ 55% of Vermont adults are overweight or obese
 - ❖ 26% of Vermont high-school students are overweight or at risk of becoming overweight
 - ❖ 30% of low-income children between 2 and 5 years of age in Vermont are overweight or at risk of becoming overweight (1)
- According to the 2019 CHNA report:
 - ❖ More than **1 in 4** Washington County adults are obese (**26%**)
 - ❖ **1 in 5** children in Washington County are food insecure
 - ❖ **11.6 %** of households are receiving food stamps; 8,319 Washington County residents are participating in 3SquaresVT, the federal Supplemental Nutrition Assistance Program
 - ❖ **1 in 3** children in Washington County are eligible for free or reduced price lunch (2)
- Food insecurity in Vermont has increased by one-third during the coronavirus pandemic, from 18.3% to 24.3%, according to a statewide survey conducted by the University of Vermont at the end of March.
- In this statewide survey, respondents with food insecurity expressed greater worry about food access challenges, like buying foods that would last longer (77%), buying different and/or cheaper foods (66%) or eating less (66%) (3).

Public Health Cost and Challenges due to COVID 19

- The impact of temporary changes in diet due to the COVID pandemic has substantial and permanent consequences.
- A significant population in the Berlin community relies on food stamps and the COVID pandemic poses new challenges such as buying foods that would last longer and buying different or cheaper foods.
- According to the Academy of Nutrition and Dietetics, it takes about three weeks to establish a new behavior pattern and about three months to make it a habit. The COVID pandemic has affected many people's lives and eating habits for the last years. (4)
- New and unhealthy eating habits formed from the pandemic such as bingeing and increased snacking are likely to worsen the rates of obesity. Obesity has important consequences on our nation's health and economy. It is linked to a number of chronic diseases, including coronary heart disease, stroke, diabetes, and some cancers.
- For many individuals, time, price, and availability of food options may play an important role during the pandemic. Through this project, we can estimate how many individuals at the Central Vermont Medical Center in Berlin, rely on fast food "take-outs" and buy food from restaurants during the COVID pandemic, instead of preparing home cooked meals. Conversely, some individuals may be investing in newer healthier alternatives such as the prepare your own meal kits.

COMMUNITY PERSPECTIVE AND SUPPORT

- “We have noticed that many of the CVMC patients who are referred to us have lost their jobs and this has affected their diet. They find it much cheaper to buy 2L of soda than to buy a gallon of milk. Other patients are eating more processed foods. We have also seen the opposite, where some patients are eating less take-outs because restaurants are closed. Similarly, a subset of patients are eating healthier because they were able to receive unemployment money and are using it to buy more produce. We have seen a wide variety, but overall, majority are eating unhealthier. The most frequent reason we encounter is excessive snacking. People who are working from home are taking trips to the kitchen during their break times and as a result they have been snacking too often.”

- **Nancy Wagner**, registered dietitian at Central Vermont Medical Center

COMMUNITY PERSPECTIVE AND SUPPORT

“While we haven’t noticed any changes in the quantity or quality of food donations we receive, we have noticed a huge drop in the amount of people utilizing our food shelf since the start of the pandemic. Before COVID, around 20-23 families relied on our food bank on a weekly basis and now, we only see around 9-14 families. ”

- **Helen**, Manager of Williamstown Food Shelf

Methodology

- Handed out surveys to 23 patients who presented to CVMC for a visit with their primary care providers. These surveys were filled by patients in the presence of a medical student.
- Patients were allowed to ask clarifying questions while filling out the survey if they found any of the questions unclear.
- Recorded answers and grouped the causes into common categories.
- Categories include financial and economic reasons, convenience and availability, poor planning (limited grocery shopping or buying too much food), and compulsive eating.

Methodology

Diet and COVID 19 Survey

Circle an option:

Has your diet changed as a result of the pandemic?

YES

NO

If yes, how has it changed?

LESS HEALTHY DIET

MORE HEALTHY DIET

Circle up to three reasons that may be the cause of the diet change:

Compulsive eating from boredom

More take out/eating out

Lack of transportation to grocery stores

Grocery shopping on a tighter budget

Going to the grocery more often

Buying more junk food

Going to the grocery less often

Buying more vegetables and fruits

Eating more home cooked meals

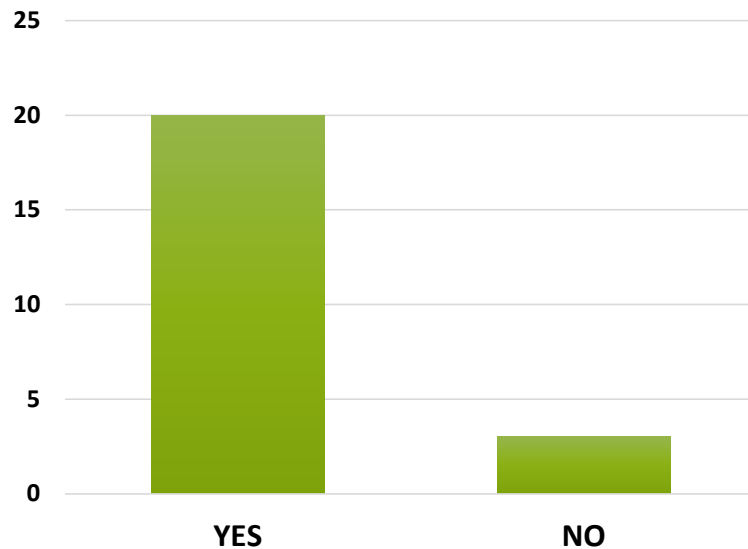
Preparing meals with healthy meal kits (eg. Hello Fresh)

Of the choices which is the main reason? _____

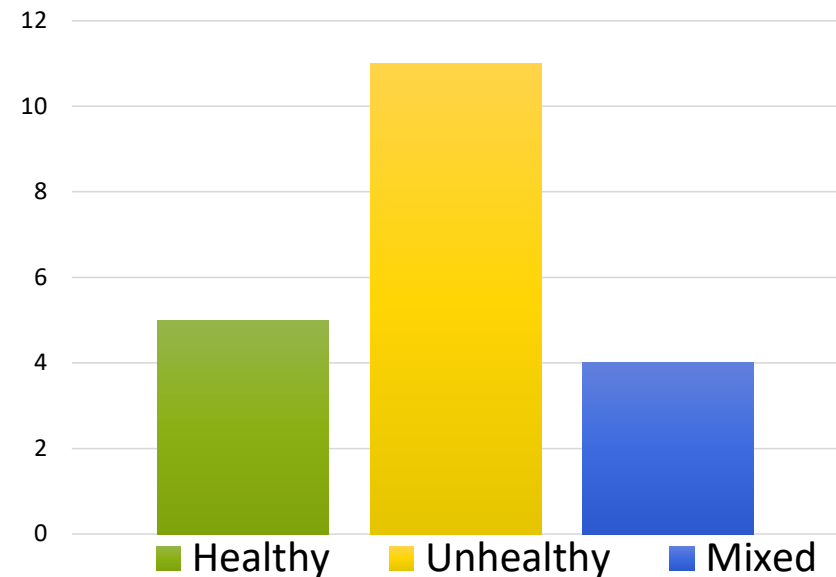
Any other reasons that were not listed? _____

RESULTS

Has your diet changed as a result of the pandemic?



Type of diet change during the pandemic



23 patients were given the survey. Out of the 23 patients, 20 patients reported that they noticed a change in their diet as a result of COVID 19. 3 patients responded that they haven't noticed any changes. Of the 20 patients who noticed a change in their diet, 5 reported that their diet was more healthy compared to the start of the pandemic and 11 reported that their diet was less healthy compared to before the pandemic began. 4 patients were unable to choose a response and either wrote or verbally stated that it was difficult to choose because they made a variety of changes that included healthy and unhealthy modifications.

RESULTS

	# of patients		# of patients
Compulsive Eating	6	Cost of groceries	4
Going to grocery more often	0	Better planning: Buying more fruits and vegetables in bulk	5
Going to grocery less often	9	Poor Planning: Buying more junk food in bulk	4
Lack of transportation	1	Using healthy meal kits	2
Eating more home cooked meals	5	Eating more takeout	4

Based on the collected data from the survey, a majority of patients reported that they were going to the grocery store less often and this has impacted their diet. The next frequently cited reason for a change in diet during the pandemic was compulsive eating. A few responders noted that they were eating out less because their favorite restaurants were closed and as a result, they were eating more home cooked meals. Not many patients noted lack of proper transportation to get groceries and reliance on healthy meal kits as main reasons for their change in diet. Lastly, 0 patients noted going to the grocery more often as a cause of their change in diet.

Evaluation of effectiveness and limitations

The questions were asked to patients who presented to CVMC for a visit with their primary care providers. These surveys were filled by patients in front of a medical student.

- When using a questionnaire, there is always the possibility of dishonest or withheld responses due to social desirability bias and attempting to protect privacy.
- Open-ended questions allow for individualized answers by the participants, but when analyzing the responses, they may be open to interpretation and fall into multiple categories.
- An option in the questionnaire about cost of groceries directly correlates with food insecurity. Patients may feel uncomfortable to disclose that information.
- Conversely, when given a series of options, patients may feel prompted to circle a response which they might not have initially considered.
- Some responders may have circled “NO” to the initial question on the survey asking if they noticed any changes in their diet due to COVID 19 pandemic to avoid filling out the rest of the survey which asks about these changes in more detail.
- Lastly, responders were asked to choose up to three reasons from a list of options. This may have limited patients who attributed their diet change to a multitude of factors from the list.

Recommendations for Future Interventions

- Analyzing the incidence of obesity, cardiovascular health diseases and diabetes after the pandemic and correlating the results with reported incidence of diet changes during the pandemic.
- Handing out pamphlets containing local resources and financial support systems to help patients with food insecurity such as Capstone Community Action or 3SquaresVT.
- Connecting patients with the Community Health Team Services at CVMC. CHT services provide health coaching, nutrition and diabetes education and counseling, self management workshops, and food assistance to interested CVMC patients.

Changes that primary care physicians can make:

- More frequent follow up visits with patients for routine lab testing and health disease prevention.
- Encouraging patients to change unhealthy behaviors with motivational interviewing
- Referring patients for cognitive behavior therapy to encourage more healthy eating habits.

REFERENCES

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2. "Community Health Needs Assessment Final Report." *Community Health Needs Assessment*, The University of Vermont Central Vermont Medical Center, Aug. 2019, www.cvmc.org/sites/default/files/documents/Community-Health-Needs-Assessment-2019.pdf.
3. "UVM Survey: Food Insecurity in Vermont Rose 33% During Pandemic." *UVM Survey: Food Insecurity in Vermont Rose 33% During Pandemic | UVM Today | The University of Vermont*, www.uvm.edu/uvmnews/news/uvm-survey-food-insecurity-vermont-rose-33-during-pandemic.
4. "National Nutrition Month." *EatRight*, www.eatright.org/food/resources/national-nutrition-month.

INTERVIEW CONSENT FORM

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Consented

Name: Nancy Wagner, Registered Dietician at CVMC

Name: Helen, Manger of Williamstown Food Shelf